

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-24. (Canceled).

25. (Currently amended) An enriched or purified preparation of human mitotic oligodendrocyte progenitor cells, wherein the majority of cells in the enriched or purified preparation differentiate mature into O4 positive oligodendrocytes, when cultured in PDGF, FGF2, and NT3, and further develop into galactocerebroside positive oligodendrocytes in the presence of 5% FBS/IGF-1, the mitotic oligodendrocyte progenitor cells are from a post-natal human, and a human cyclic nucleotide phosphodiesterase gene P2 promoter is transcriptionally active in the oligodendrocyte progenitor cells.

26. (Currently amended) An enriched or purified preparation of human mitotic oligodendrocyte progenitor cells, wherein the majority of cells in the enriched or purified preparation differentiate mature into O4 positive oligodendrocytes, when cultured in PDGF, FGF2, and NT3, and further develop into galactocerebroside positive oligodendrocytes in the presence of 5% FBS/IGF-1, the mitotic oligodendrocyte progenitor cells are from an adult human, and a human cyclic nucleotide phosphodiesterase gene P2 promoter is transcriptionally active in the oligodendrocyte progenitor cells.

27.-28. (Canceled).

29. (Currently amended) An enriched or purified preparation of human mitotic oligodendrocyte progenitor cells, wherein the majority of cells in the enriched or purified preparation differentiate mature into O4 positive oligodendrocytes, when cultured in PDGF, FGF2, and NT3, and further develop into galactocerebroside positive oligodendrocytes in the presence of 5% FBS/IGF-1, the oligodendrocyte progenitor cells express A2B5 antigen and do not express O4 antigen.

30. (Currently amended) An enriched or purified preparation of human mitotic oligodendrocyte progenitor cells, wherein the majority of cells in the enriched or purified preparation differentiate mature into O4 positive oligodendrocytes, when cultured in

PDGF, FGF2, and NT3, and further develop into galactocerebroside positive oligodendrocytes in the presence of 5% FBS/IGF-1, the mitotic oligodendrocyte progenitor cells are from a fetal human and a human cyclic nucleotide phosphodiesterase gene P2 promoter is transcriptionally active in the oligodendrocyte progenitor cells.

31. (Previously presented) The enriched or purified preparation of claim 25, wherein the oligodendrocyte progenitor cells do not express GFAP antigen.

32. (Previously presented) The enriched or purified preparation of claim 26, wherein the oligodendrocyte progenitor cells do not express GFAP antigen.

33. (Previously presented) The enriched or purified preparation of claim 29, wherein the oligodendrocyte progenitor cells do not express GFAP antigen.

34. (Previously presented) The enriched or purified preparation of claim 30, wherein the oligodendrocyte progenitor cells do not express GFAP antigen.

35. (Previously presented) The enriched or purified preparation of claim 25, wherein the oligodendrocyte progenitor cells do not express β III tubulin antigen.

36. (Previously presented) The enriched or purified preparation of claim 26, wherein the oligodendrocyte progenitor cells do not express β III tubulin antigen.

37. (Previously presented) The enriched or purified preparation of claim 29, wherein the oligodendrocyte progenitor cells do not express β III tubulin antigen.

38. (Previously presented) The enriched or purified preparation of claim 30, wherein the oligodendrocyte progenitor cells do not express β III tubulin antigen.

39. (Previously presented) The enriched or purified preparation of claim 29, wherein the oligodendrocyte progenitor cells are from an adult human.

40. (Previously presented) The enriched or purified preparation of claim 29, wherein the oligodendrocyte progenitor cells are from a fetal human.

41. (Previously presented) The enriched or purified preparation of claim 29, wherein a human cyclic nucleotide phosphodiesterase gene P2 promoter is transcriptionally active in the oligodendrocyte progenitor cells.

42. (Currently amended) The enriched or purified preparation of claim 25, wherein $66.3 \pm 6.8\%$ of cells in the enriched or purified preparation mature into O4-IR oligodendrocytes when cultured in the presence of 5% FBS/IGF-1.

43. (Currently amended) The enriched or purified preparation of claim 26, wherein $66.3 \pm 6.8\%$ of cells in the enriched or purified preparation mature into O4-IR oligodendrocytes when cultured in the presence of 5% FBS/IGF-1.

44. (Currently amended) The enriched or purified preparation of claim 29, wherein $66.3 \pm 6.8\%$ of cells in the enriched or purified preparation mature into O4-IR oligodendrocytes when cultured in the presence of 5% FBS/IGF-1.

45. (Canceled).